@004

Please typo a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Orlice; U.S. OEPARTMENT OF COMMERCE
to a collection of information unless it displays a welld OMB control number. Under the Paperwork Reduction Act of 1995, no persons are required to reso

Substitute fo	or form 1449A/F	PTO		Complete if Known		
				Application Number	10/806,956	
INFOR	RMATION	DISCL	OSURE	Filing Date	March 23, 2004	
STAT	EMENT E	BY APPL	LICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(use as many sheets as necessary)			sery)	Examiner Name	Dougherty, Thomas M.	
Sheet	1	of	2	Attorney Docket Number	PA128-04D09	

	1	U.S. Patent Doc	amont	U.S. PATENT DOCUMEN		Press Calvers 11
Ecominer Initials*	Cile No.1	Number	Kind Code ² (Ji known)	Name of Palentee or Applicant of Cited Document	Oate of Publication of Cited Oppumpnt MM-DO-YYYY	Pages, Columns, Unes, Where Relevant Pessages or Relevant Figures Appear
mo	C1	2004/0168441	A1	Choi et al.	09-02-2004	
mo	æ	2004/0168588	A1	Choi et al.	09-02-2004	
mo	C3	2004/0149687	A1	Chol et al.	08-05-2004	
			ļ. <u> </u>			
			 			
			ļ			
			ļ			
•			 			
 		<u>.</u>	}	"		
	 				, -	
						-
	-		<u> </u>			
] 			· · · · · · · · · · · · · · · · · · ·
						
Scaminer		homan			Date	-15-05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant.

*Unique citation designation number. *See attached Kinds of U.S. Patent Documents. *Fenter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precode the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is otherhed.

Please type a plus sign (+) inside this box -> +

PTO/S8/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Tredemark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Substitute for form 1449B/PTO Complete If Known **Application Number** 10/806,956 INFORMATION DISCLOSURE **Filing Date** March 23, 2004 STATEMENT BY APPLICANT Choi et al. First Named Inventor Group Art Unit 2834 (use as many sheets as necessary) **Examiner Name** Dougherty, Thomas M. 2 2 Sheet of Attorney Docket Number .PA128-04D09

OTHER PRIOR	R ART -	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cile No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	C4	United States Patent Application No. 09/698,317 to Choi et al., "High-Precision Orientation Alignment and	
TMD	ش ا	Gap Control Stages for Imprint Lithography Processes.* Filed October 27, 2000.	
1		United States Patent Application No. 10/617,321 to Choi et al., "Method of Separating a Template from a	1
TMD	C5	Substrate During Imprint Lithography." Filed July 10, 2003.	
TWID	C 6	United States Patent Application No. 10/785,248 to Choi et al., "Method to Control the Relative Position Between a Body and a Substrate." Filed February 24, 2004.	
-		· · · · · · · · · · · · · · · · · · ·	

Examiner	10/1 200		Date 1000
Signature	Manage office	Cougherty	Considered 2 - 15 - 25
	12 4 12 1 11 11 12	CHIMAN,	Considered 2 70 60

*EXAMINER: Initial if reference considered, whether or not citytion is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*Unique distion designation number. *Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1965,

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

STATEMENT BY APPE

(use as many sheets as necessary)

2 of Sheet

5, no persons are required t	U.S. Patent and Trademark Of o respond to a collection of information un	ffice; U.S. DEPARTMENT OF COMMERCE less it displays a valid OMB control number			
Ö	Comple	Complete if Known			
JAH 1 4 2005 7	Application Number	10/806,956			
CLOSURE PERCANT	Filing Date	March 23, 2004			
PEICANT	First Named Inventor	Choi et al.			
	Group Art Unit	2834			
ecessary)	Examiner Name	Dougherty, Thomas M.			
2	Attorney Docket Number	PA128-04D09			

	Т	U.S. Patent Do	current	U.S. PATENT DOCUMEN	Date of Publication of	Pages, Columns, Lines,
Examiner Initials*	Cite No. ¹	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
my	B1	4,098,001		Watson	07-04-1978	
ang	B2	4,155,169		Drake et al.	05-22-1979	
mm	B3	4,202,107		Watson	05-13-1980	
can	B4	4,355,469		Nevins et al.	10-26-1982	
		····				
	·					
			 			
Examiner Signature	1/1	Umus T	m /	7 1	Date Considered	2-15-05

*EXAMINER: Initial if reference considered, whether or not citation is conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE to a collection of information unless it displays a valid OMB control number.

Substit	ute for form 1449B/P	nb .	IAH 1 4 2005 7	Complete if Known		
		Ex		Application Number	10/806,956	
INF	ORMATION	DIS	ELOSTIKE	Filing Date	March 23, 2004	
STATEMENT BY APPLICANT				First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(use as many sheets as necessary)			ecessary)	Examiner Name	Dougherty, Thomas M.	
Sheet	2	of	2	Attorney Docket Number	PA128-04D09	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²					
AM	B5	Amendment from United States patent application no. 10/775,707.						
	·							

Examiner	1 ml	~ /)	///////	Date	10 10	
CABITUTION	1 /////	- 10 (1-1-	a de la companya de l	Date	1 7 ~ 15 ~ 7/5	
Signature	1. I Giama	1)"I · KDUN	mercin	Considered	12.0.0	
Signature	A NOTTOD	VIIIV	W V V V V V	Considered		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Peperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a variation number.

Substi	tute for form 1449B/P	TO		Complete if Known		
				Application Number	10/806,956	
INF	ORMATION	DIS	CLOSURE	Filing Date	March 23, 2004	
ST	ATEMENT B	Y AF	PPLICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
	(use as many shee	ts as n	ecessary)	Examiner Name	Dougherty, Thomas M.	
Sheet	1	of	1	Attorney Docket Number	PA128-04D09	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T-2				
TMD	B5	Amendment from United States patent application no. 10/775,707.					
· 							
		·					
		,					

Examiner	Man m	0 1	Date	5 10 1
Signature	Werney M	1 breights	Considered	12-13-05
	.,			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English tanguage Translation is attached.

8

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
o a collection of information unless it displays a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

eet 1 of

Complete if Known							
Application Number	10/806,956						
Filing Date	March 23, 2004						
First Named Inventor	Choi et al.						
Group Art Unit	2834						
Examiner Name Dougherty, Thomas M.							
Attorney Docket Number	PA128-04D09						

	U.S. PATENT DOCUMENTS										
Examiner Initials*	Cite No. ¹	U.S. Patent Doc Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
THUD	A1	4,070,116		Frosch et al.	01-24-1978						
7	A2	4,600,309		Fay	07-15-1986						
	A3	4,848,911		Uchida et al.	07-18-1989						
	A4	5,074,667		Miyatake	12-24-1991						
	A5	5,148,036		Matsugu et al.	09-15-1992						
	A6	5,148,037		Suda et al.	09-15-1992						
	A7	5,151,754		Ishibashi et al.	09-29-1992						
	A8	5,179,863		Uchida et al.	01-19-1993						
	A9	5,376,810		Hoenk et al.	12-27-1994						
	A10	5;424,549		Feldman	06-13-1995						
	A11	5,670,415		Rust	09-23-1997						
	A12	5,743,998		Park	04-28-1998						
	A13	5,855,686		Rust	01-05-1999						
	A14	5,948,219		Rohner	09-07-1999						
	A15	6,035,805		Rust	03-14-2000						
	A16	6,150,680	ļ	Eastman et al.	11-21-2000						
	A17	6,326,627	B1	Putvinski et al.	12-04-2001						
	A18	2002/0132482	A1	Chou	09-19-2002						
	A19	2002/0167117	A1	Chou	11-14-2002						
	A20	6,482,742	B1	Chou	11-19-2002						
	A21	6,534,418	B1	Plat et al.	03-18-2003						
	A22	6,541,360	B1	Plat et al.	04-01-2003						
	A23	2003/0081193	A1	White et al.	05-01-2003						
	A24	2003/0080471	A1	Chou	05-01-2003						
	A25	2004/0036201	A1	Chou et al.	02-26-2004						
	A26	5,468,542		Crouch	11-21-1995						
	A27	5,366,851		Novembre	11-22-1994						
	A28	5,362,606		Hartney et al.	11-08-1994						
	A29	5,324,683		Fitch et al.	06-28-1994						
	A30	5,212,147		Sheats	05-18-1993	· · · · · · · · · · · · · · · · · · ·					
	A31	5,458,520		DeMercurio et al.	10-17-1995						
	A32	5,453,157		Jeng	09-26-1995						
7/	A33	5,439,766		Day et al.	08-08-1995						
dmi	A34	5,431,777	_	Aystin et al.	07-1-1-1995						

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁹Applicant is to place a check mark here if English language Translation is attached.

Substitute for	form 1449A/F	το		Complete if Known		
	•			Application Number	10/806,956	
INFOR	MATION	DISCLO	OSURE	Filing Date	March 23, 2004	
STATE	MENT E	Y APPL	ICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(use as many sheets as necessary)				Examiner Name	Dougherty, Thomas M.	
Sheet 2 of 8				Attorney Docket Number	PA128-04D09	

1						
Examiner Initials*	Cite No.'	U.S. Palent Do	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
tmo	A35	5,422,295		Choi et al.	06-06-1995	
	A36	5,421,981		Leader et al.	06-06-1995	
	A37	5,417,802		Obeng	05-23-1995	
	A38	5,380,474		Rye et al.	01-10-1995	
	A39	5,374,454		Bickford et al.	12-20-1994	
	A40	5,330,881	1	Sidman et al.	07-19-1994	
	A41	5,328,810		Lowrey et al.	07-12-1994	
	A42	5,318,870		Hartney	06-07-1994	
	A43	5,244,818	T	Jokerst et al.	09-14-1993	
	A44	5,242,711		DeNatale et al.	09-07-1993	
	A45	5,240,878		Fitzsimmons et al.	08-31-1993	
	A46	5,108,875		Thackeray et al.	04-28-1992	
	A47	5,053,318		Gulla et al.	10-01-1991	
	A48	4,964,945		Calhoun	10-23-1990	
	A49	4,908,298		Hefferon et al.	03-13-1990	
	A50	4,921,778		Thackeray et al.	05-01-1990	
	A51	4,919,748		Bredbenner et al.	04-24-1990	
	A52	3,783,520		King	01-08-1974	
	A53	6,776,094	B1	Whitesides et al.	08-17-2004	
	A54	4,201,800		Alcorn et al.	05-06-1980	
	A55	4,426,247		Tamamura et al.	01-17-1984	
	A56	4,507,331		Hiraoka	03-26-1985	
	A57	4,552,833		lto et al.	11-12-1985	
	A58	4,657,845		Frechet et al.	04-14-1987	
	A59	4,692,205		Sachdev et al.	09-08-1987	
	A60	4,707,218		Giammarco et al.	11-17-1987	
	A61	4,737,425	·	Lin et al.	04-12-1988	
	A62	4,808,511		Holmes	02-28-1989	
	A63	4,826,943		Ito et al.	05-02-1989	
	A64	4,857,477		Kanamori	08-15-1989	
	A65	4,891,303		Garza et al.	01-02-1990	
	A66	4,931,351		McColgin et al.	06-05-1990	
V	A67	4,976,818		Hashimoto et al.	12-11-1990	
tmp	A68	4,980,316		Huebner	12-25-1990	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁹Applicant is to place a check mark here if English language Translation is attached.

Substitute for	form 1449A/PT	0		Complete if Known		
				Application Number	10/806,956	
INFOR	MATION	DISCL	OSURE	Filing Date	March 23, 2004	
STATE	MENT BY	/ APPL	LICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(use as many sheets as necessary)				Examiner Name	Dougherty, Thomas M.	
Sheet 3 of 8		Attorney Docket Number	PA128-04D09			

	T	U.S. Patent Doo		I	Date of Publication of	Pages, Columns, Lines,
Examiner Initials*	Cile No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Refevant Passages or Refevant Figures Appear
MP	A69	4,999,280		Hiraoka	03-12-1991	
	A70	5,071,694		Uekita et al.	12-10-1991	
	A71	5,169,494		Hashimoto et al.	12-08-1992	
	A72	5,173,393		Sezi et al.	12-22-1992	
	A73	5,198,326		Hashimoto et al.	03-30-1993	
	A74	5,234,793		Sebald et al.	08-10-1993	
	A75	5,314,772		Kozicki et al.	05-24-1994	
	A76	5,527,662		Hashimoto et al.	06-18-1996	
	A77	5,654,238		Cronin et al.	08-05-1997	
	A78	5,700,626		Lee et al.	12-23-1997	
	A79	5,736,424		Prybyla et al.	04-07-1998	
1	A80	5,895,263		Carter et al.	04-20-1999	
1	A81	5,907,782		Wu	05-25-1999	
	A82	5,926,690		Toprac et al.	07-20-1999	
	A83	5,948,570		Komblit et al.	09-07-1999	
	A84	6,033,977		Gutsche et al.	03-07-2000	
1	A85	6,096,655		Lee et al.	08-01-2000	
	A86	6,150,231		Muller et al.	11-21-2000	
\neg	A87	6,245,581	B1	Bonser et al.	06-12-2001	
	A88	6,274,294	B1	Hines	08-14-2001	
7	A89	6,329,256	B1	lbok	12-11-2001	
	A90	6,383,928	B1	Eissa	05-07-2002	
\neg	A91	6,387,783	B1	Furukawa et al.	05-14-2002	
7	A92	6,388,253	B1	Su	05-14-2002	·
T	A93	6,391,798	B1	DeFelice et al.	05-21-2002	
1	A94	6,455,411	B1	Jiang et al.	09-24-2002	· · · · · · · · · · · · · · · · · · ·
	A95	6,489.068	B1	Куе	12-03-2002	
	A96	6,514,672	B2	Young et al.	02-04-2003	
	A97	6,561,706	B2	Singh et al.	05-13-2003	
	A98	6,565,928	B2	Sakamoto et al.	05-20-2003	
	A99	2003/011368	A1	Mancini et al.	06-19-2003	
\neg	A100	2003/0129542	A1	Shih et al.	07-10-2003	
V	A101	6,632,742	B2	Yang et al.	10-14-2003	
TmD	A102	6,635,581	B2	Wong	10-21-2003	
xaminer Signature	1	romas m	horse	sherts	Date Considered	2-15-05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitute f	for form 1449A/P	TO		Comple	Complete if Known		
				Application Number	10/806,956		
INFO	RMATION	DISCI	LOSURE	Filing Date	March 23, 2004		
STAT	EMENT B	Y APF	LICANT	First Named Inventor	Choi et al.		
				Group Art Unit	2834		
(u	ise as many shee	ets as nece	essary)	Examiner Name	Dougherty, Thomas M.		
Sheet	4	of	8	Attorney Docket Number	PA128-04D09		

			1	J.S. PATENT DOCUMENTS	S	
Examiner Initials*	Cite No.1	U.S. Patent Doc	ument Kind Code ² (il known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
mp	A103	6,646,662	B1	Nebashi et al.	11-11-2003	
7	A104	6,677,252	B2	Marsh	01-13-2004	
	A105	2004/0029041	A1	Shih et al.	02-12-2004	
	A106	6,703,190	B2	Elian et al.	03-09-2004	
	A107	6,716,767	B2	Shih et al.	04-06-2004	
- 1	A108	6,730,256	B1	Bloomstein et al.	05-04-2004	
	A109	6,737,202	B2	Gehoski et al.	05-18-2004	
	A110	6,743,713	B2	Mukherjee-Roy et al.	06-01-2004	
	A111	6,676,983	B1	Fujiyama et al.	07-27-2004	
1,	A112	6,770,852	B1	Steger	08-03-2004	
V	A113	6,777,170	B1	Bloomstein et al.	08-17-2004	
mp	A114	4,119,688		Hiraoka	10-10-1978	
-						
-						
<u> </u>		· · · · ·				
		··				
		· · · · · · · · · · · · · · · · · · ·				
				 		
						·
	-					
						
						
	1					
xaminer lignature	M	romes M	ha	al it	Date Considered	2-15-05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitute for	r form 1449A/PTC)		Complete if Known		
				Application Number	10/806,956	
INFOR	MATION D	DISC	LOSURE	Filing Date	March 23, 2004	
STATE	MENT BY	AP	PLICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(us	e as many sheets	as ne	cessary)	Examiner Name	Dougherty, Thomas M.	
Sheet 5 of 8				Attorney Docket Number	PA128-04D09	

				FOREIGN	PATENT DOCUMENTS			
Examiner tritials*	Cite No. ¹	Office ³	Foreign Patent Docume Number ⁴	kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ ^d
TMD	A115	JP	63-138730		Koji	12-01-1986		
CVMC	A116	JP	55-88332		Masahiro	12-26-1978		Ι
TMD	A117	JP	57-7931		Tadao et al.	06-18-180		
Min	A118	JP	02-92603		Kurikawa et al.	04-03-1990		
my	A119	JP	02-24848		Kamio	01-26-1990		
mn	A120	wo	00/21689	•	Chou et al.	04-20-2000		1
TWO_	A121	wo	01/47003	A2	Steiner et al.	06-28-2001		\vdash
								\vdash
								‡
						·		ــــــــــــــــــــــــــــــــــــــ
								_
								1_
								<u> </u>
							<u> </u>	
								Ţ
					•			T
								T
								1
	 							\vdash
				اسيبا				

Examiner	61	9			Date	- 16 06
LABITITIES	FAII	'Ma			Date	17-19-05
Signature	Mamas	M.	windy	~	Considered	
			1 9			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Substitu	ute for form 1449B/	PTO		Complete if Known		
				Application Number	10/806,956	
INF	ORMATION	DIS	CLOSURE	Filing Date	March 23, 2004	
STA	ATEMENT B	Y AF	PPLICANT	First Named Inventor	Choi et al.	
			•	Group Art Unit	2834	
_	(use as many she	ets as n	ecessary)	Examiner Name	Dougherty, Thomas M.	
Sheet	6	of	8	Attorney Docket Number	PA128-04D09	

OTHER PRIC	R ART - I	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s publisher, city and/or country where published.	
TV12	A122	Abstract of Japanese Patent 63-138730	
	A123	Abstract of Japanese Patent 55-88332	
	A124	Abstract of Japanese Patent 57-7931	
	A125	Abstract of Japanese Patent 02-92603.	
	A126	Translation of Japanese Patent 02-92603.	
	A127	Abstract of Japanese Patent 02-24848.	
	A128	Translation of Japanese Patent 02-24848.	
	A129	HEIDARI et al., "Nanoimprint Lithography at the 6 in. Wafer Scale," Journal of Vacuum Science Technology, Nov/Dec 2000, pp. 3557-3560, vol. B, no. 18(6)/	
A130 NERAC.COM Retro Search, "Reduction of Dimension of Cont		NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes", August 31, 2004	
ami	A131	NERAC.COM Retro Search, "Trim Etching of Features Formed on an Organic Layer", September 2, 2004	
YMD A132 M		NERAC.COM Retro Search, "Multi-Layer Resists", September 2, 2004	

Examiner Signature	Oheman M.	Lukoti	Date 2	15-05
Signature	The second of the	1) AMERICAN WING	Considered 2	13-02

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known		
				Application Number	10/806,956	
INF	ORMATION	N DISC	CLOSURE	Filing Date	March 23, 2004	
STA	ATEMENT I	BY AP	PLICANT	First Named Inventor	Choi et al.	
				Group Art Unit	2834	
	(use as many sh	eets as ne	cessary)	Examiner Name	Dougherty, Thomas M.	
Sheet 7 of 8		Attorney Docket Number	PA128-04D09			

OTHER PRIO	R ART -	NON PATENT LITERATURE DOCUMENTS	
Examiner Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number publisher, city and/or country where published.		T²	
m9 A133		HU et al., "Flourescence Probe Technicques (FPT) for Measuring the Relative Efficiencies of Free-Radica Photoinitiators", s0024-9297(97)01390-9; "Macromolecules" 1998, vol. 31, no. 13, pp. 4107-4113, 1998 American Chemical Society. Published on Web 05/29/1998	
	A134	FEYNMAN, Richard P., "There's Plenty of Room at the Bottom—An Invitation to Enter a New Field of Physics," 12 pp [online[Retreived 9/23/04 from URI:http://www.zyvex.com/nanotech/feynman.html.	
	A135	CIBA SPECIALTY CHEMICALS BUSINESS LINE COATINGS, "What is UV Curing?", 45 pp [online[Retreived 9/24/04 from URL:http://www.cibasc.com/image.asp?id=4040.	
	A136	Communication Relating to the Results of the Partial International Search; International Appl. No. PCT/US2002/015551.	
	Papirer et al., "The Graftijng of Perfluorinated Silanes onto the Surface of Silica: Characterization by I Gas Chromatography," August 1993, pp238-242, vol. 159, Issue 1.		
	A138	Abstract of Papirer et al., "The Graftijng of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography," August 1993, pp238-242, vol. 159, Issue 1.	
	A139	Hirai et al., "Mold Surface Treatment for Imprint Lithography," August 2001, pp 457-462, vol 14, No. 3.	
	A140	Abstract of Hiral et al., "Mold Surface Treatment for Imprint Lithography," August 2001, pp 457-462, vol 14, No. 3.	
	Sung et al., "Micro/nano-tribological Characteristics of Self-Assembled Monoloayer and its Application in Nano-Structure Fabrication," July 2003, pp. 808-818, vol. 255, no. 7.		
	A142	Abstract of Sung et al., "Micro/nano-tribological Characteristics of Self-Assembled Monoloayer and its Application in Nano-Structure Fabrication," July 2003, pp. 808-818, vol. 255, no. 7.	
tmis	A143	Roos et al., "Nanoimprint Lithography with a Commerical 4 Inch Bond System for Hot Embossing," October 2001, pp. 427-435, vol. 4343.	

	·				
Examiner	alma m		<i>y</i>	Date	- 1C-0C
Signature	Thomas M.	Quever	\mathcal{V}	Considered	12-13-00

^{*}EXAMINER: Initial if reference considered, whether or not clation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known		
			,	Application Number	10/806,956	
INFC	RMATIO	N DISC	CLOSURE	Filing Date	March 23, 2004	
STATEMENT BY APPLICANT				First Named Inventor	Choi et al.	
				Group Art Unit	2834	
(use as many sheets as necessary)				Examiner Name	Dougherty, Thomas M.	
Sheet 8 of 8		Attorney Docket Number	PA128-04D09			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
MP	A144	Abstract of Roos et al., "Nanoimprint Lithography with a Commerical 4 Inch Bond System for Hot Embossing," October 2001, pp. 427-435, vol. 4343.					
	_						
	-						
. 6							
		<u> </u>					

Examiner Signature	Themas M.	housh	Date Considered	2-15-05

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.